

# yumeng ma

HUMAN-COMPUTER INTERACTION (HCI) • HUMAN-AI INTERACTION • ACCESSIBILITY • VISUAL & SOCIAL COMPUTING

[✉ yumengma@uw.edu](mailto:yumengma@uw.edu) | [🏡 yumengma.com](http://yumengma.com) | [momentine](#) | [momentine](#) | Citizenship: U.S. Citizen

## Education

---

### **University of Washington**

PHD IN COMPUTER SCIENCE AND ENGINEERING (HCI)

Advisor: Jacob O. Wobbrock

Seattle, WA

2024 - Present

### **Brown University**

Sc.M IN COMPUTER SCIENCE

GPA: 4.0 / 4.0

Advisor: Jeff Huang

Providence, RI

2022 - 2024

### **Arizona State University**

B.S. IN COMPUTER SCIENCE AND PSYCHOLOGY

Barrett Honors College

GPA: 4.0 / 4.0 Summa Cum Laude

Thesis: "Assessing Exhibit Interaction through Bridging the Connections Between Biometrics and Traditional Tools"

Tempe, AZ

2019 - 2022

## Publications

---

\* denotes equal contribution

1 paper in submission to IEEE

1 paper accepted to CHI 2026. Preprint coming soon!

### CONFERENCE PROCEEDINGS

Zainab Iftikhar, **Yumeng Ma**, and Jeff Huang. 2023. “Together but not together”: Evaluating Typing Indicators for Interaction-Rich Communication. In Proceedings of the 2023 Conference on Human Factors in Computing Systems (CHI ’23). [paper](#)

Ian Gonsher, **Yumeng Ma**, Ivan Pineda-Dominguez, Matthew Lee, and Yuxin. 2023. The Mixed Reality Passthrough Window: Rethinking the Laptop Videoconferencing Experience. Human Interaction and Emerging Technologies (IHET-AI 2023): Artificial Intelligence and Future Applications. [paper](#)

### SHORT PAPERS & EXTENDED ABSTRACTS

**Yumeng Ma\*** and Jiahao Ren\*. 2023. ProactiveAgent: Personalized Context-Aware Reminder System. In The 36th Annual ACM Symposium on User Interface Software and Technology (UIST ’23 Adjunct). [paper](#)

## Research Experience

---

### **UW ACE Lab**

Seattle, WA

GRADUATE RESEARCH ASSISTANT, ADVISED BY PROF. JACOB WOBBROCK

2024 - Present

- Currently collaborating with Microsoft on benchmarking AI-generated code to identify accessibility gaps and improve its reliability for inclusive web development.

### **Brown Department of Neuroscience**

Providence, RI

COMPUTER VISION RESEARCH ASSISTANT, ADVISED BY PROF. MICHAEL PARADISO

2023 - 2024

- Built a visual prosthesis system for blind and low vision users to locate everyday objects and identify surrounding text.

### **UCLA HCI Lab**

Los Angeles, CA

HCI RESEARCH INTERN, ADVISED BY PROF. XIANG 'ANTHONY' CHEN

2023

- Led the development of a proactive reminder system that takes in user context, history, and spoken interactions by leveraging LLMs and personal agents.

## **Brown Department of Engineering**

Providence, RI

### **DESIGN RESEARCH ASSISTANT, ADVISED BY PROF. IAN GONSHER**

2022 - 2023

- Introduced a new paradigm for the integration of AR into laptop and desktop displays to enable local users to interact more easily and seamlessly with remote users during videoconferencing sessions.

## **Brown HCI Lab**

Providence, RI

### **DISTRIBUTED RESEARCH EXPERIENCES FOR UNDERGRADUATES, ADVISED BY PROF. JEFF HUANG**

2022

- Designed novel typing indicators and found that they enhance user co-presence in written communication through mixed method analysis.

## **ASU SoLET Lab**

Tempe, AZ

### **PSYCHOLOGY RESEARCH ASSISTANT, ADVISED BY DR. DANIELLE McNAMARA**

2022

- Conducted testing and evaluation of tutoring systems to optimize learning and educational practices for underrepresented groups.

## **NASA Psyche Mission**

Tempe, AZ

### **HCI RESEARCH ASSISTANT, ADVISED BY PROF. MARIA ELENA CHAVEZ ECHEAGARAY**

2021-2022

- Developed a web app that allows users to interact with the Psyche Spacecraft model and led user studies with biometric data analysis that showed the app increased public engagement.

## **Work Experience**

---

### **Infosys**

#### **RESEARCH INTERN, APPLIED RESEARCH CENTER FOR AUTONOMOUS MACHINES TEAM**

2025

- Conducted design research on autonomous vehicle interfaces and created graceful degradation strategies using multimodal hazard escalation storyboards and user studies.

### **Infosys**

#### **UX DESIGN INTERN, LIVING LABS TEAM**

2024

- Spearheaded the design of an accessible phygital UI that integrate emerging AI trends to optimize retail experiences for diverse user personas.

### **Brown + NASA**

Providence, RI

#### **MOBILE DEVELOPER**

2023 - 2024

- Led and developed a sound and haptic-enabled cross-platform mobile app to help blind and low vision individuals explore and learn about space.

### **Civilience**

#### **PROJECT MANAGEMENT & UX DESIGN INTERN | LIAISON BETWEEN FRONTEND AND UIUX**

2023

- Led the UI/UX team to design a web-based app with interactive health data visualizations and built reusable components for a consistent design system across the product

## **Awards, Fellowships, & Grants**

---

2025 **Microsoft Research Grant**, Microsoft & CREATE at University of Washington

2024 **NSF Graduate Research Fellowship**, NSF

2024 **Paul G. Allen School Fellowship**, University of Washington

2019 - 2023 **Microsoft DisAbility Scholarship**, Microsoft

2022 **Google CS Research Mentorship Program Fellowship**, Google

## **Teaching**

---

Winter '26 **CSE 443 Digital Accessibility**, TA for Jennifer Mankoff

Spring '22 **CSE 365 Information Assurance**, TA for Adam Doupe and Tiffany Bao, ASU

## Extracurricular & Work Activities

---

2021 - Present	<b>Member</b> , AccessComputing	
2022 - 2024	<b>Master's Representative</b> , Brown University CS Diversity Committee	<i>Providence, RI</i>
2023	<b>Student Volunteer</b> , UIST	<i>San Francisco, CA</i>
2020 - 2021	<b>Microsoft Support / Xbox Advocate Contract</b> , Microsoft	<i>Tempe, AZ</i>